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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/614,276	07/12/2000	Wolfgang Theimer	473-009548-US(PAR)	2128

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FAIRFIELD, CT 06824

EXAMINER

WOO, ISAAC M

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/614,276

Applicant(s)

THEIMER ET AL.

Examiner

Isaac M Woo

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13. 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to Applicant's amendment, filed on November 05, 2003 have been fully considered but they are not persuasive.
2. Claims 2-7 and 10-18 are pending.

Claim Objections

3. Claim 10 is objected to because of the following informalities:
Claim 9 has been canceled, but claim 10 is still dependent on claim 9, which causes improper claim dependency.
Appropriate correction is required.

Response to Amendment

In response to Applicant's Remarks filed on November 05, 2003, the following factual arguments are noted:

Meador and/or McNutt do not disclose or suggest,
"probability values calculated for each stored data records as a ratio of the number of times this data records has been used during this certain period in the recent past to the total number of times all the data records have been used

during this certain period so as to describe the probability of the data record being used again".

Examiner disagrees, the limitations that applicant argued is that the probability is the ratio, which is simply described as follows, (# of used of data/total # of data). Because the limitations of during a certain period in the recent past to during this certain period to calculate ratio has no factor to decide the ratio because the whole limitations are represented as mathematical form that is, ((number of times this data record/ certain period in the recent past)/ (total number of times this data record/ this certain period)). The time factors can be canceled to get the ratio of this equation. Thus it creates simple equation, (# of used of data/total # of data). McNutt discloses, McNutt discloses the equation, that is, <first-record-hit + other-record-hit >/ <total-of-all-event>, which teaches that the nominator is the number of records used, and denominator is the total number of records used. Therefore, the limitation, the ratios of number of times used this data record has been used to the total number of time used all the data records have been used, of McNutt can be used with the system of Meador to calculate the ratio.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-7 and 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meador, III et al (U.S. Patent No. 5,638,425, hereinafter, "Meador") in view of McNutt et al (U.S. Patent No. 5,649,153, hereinafter, "McNutt").

With respect to claim 18, Meador discloses the method for inputting data into system comprising, in response to an input by a user identifying one or more terms, which are appropriate as possible for this input based on confidence value (102, FIG. 5), see (col. 3, lines 9-35, FIG. 4, FIG. 5, col. 8, lines 55-67 to col. 9, lines 1-12); determining data records that match the identified terms, see (102, FIG. 5, col. 3, lines 9-35, FIG. 4, FIG. 5, col. 8, lines 55-67 to col. 9, lines 1-12); calculating an overall probability (joint probability) from the confidence value of the identified term (102, FIG. 5, col. 3, lines 9-35, FIG. 4, FIG. 5, col. 8, lines 55-67 to col. 9, lines 1-12) and the probability value of the matching data record, see (108, FIG. 5, col. 10, lines 60-67 to col. 11, lines 1-67 to col. 12, lines 1-19); processing the identified terms according to the overall probability (joint probability), see (FIG. 8, col. 8, lines 55-67 to col. 9, lines 1-12,

col. 10, lines 60-67 to col. 11, lines 1-67 to col. 12, lines 1-19). And for the limitations of during a certain period in the recent past to during this certain period to calculate ratio has no factor to decide the ratio because the whole limitations are represented as mathematical form that is, $((\text{number of times this data record/ certain period in the recent past}) / (\text{total number of times this data record/ this certain period}))$. The time factors can be canceled to get the ratio of this equation. Meador discloses the probability (108, FIG. 5, col. 10, lines 60-67 to col. 11, lines 1-67 to col. 12, lines 1-19). Meador does not disclose the probability calculated as ratios of number of times used this data record has been used to the total number of time used all the data records have been used. However, McNutt discloses the equation, that is, $\frac{\text{first-record-hit} + \text{other-record-hit}}{\text{total-of-all-event}}$, which teaches that the nominator is the number of records used, and denominator is the total number of records used. Therefore, it would have been obvious a person having ordinary skill in the art the time invention was made to combine the ratios of number of times used this data record has been used to the total number of time used all the data records have been used of the system of McNutt with the system of Meador to calculate the ratio. Because the number of ratio for the data used to total numbers of used can produce for the data probability that could be used again. The data with high ratio (probability) can show that the data can be used with high probability for later usage.

With respect to claim 2, Meador discloses the confidence value a value from an interval between number, preferably 1, corresponding to reliable identification, and that

for an input which can not be identified, corresponding to 0, including these values, see (FIG. 10A-B, col. 11, lines 42-67 to col. 12, lines 1-19).

With respect to claim 3, Meador discloses the identified terms are announced and/or displayed to a user as a system response, starting with the term identified as being the most reliable, on the basis of their overall probability (confidence value), see (102, FIG. 5, col. 3, lines 9-35, FIG. 4, FIG. 5, col. 8, lines 55-67 to col. 9, lines 1-12).

With respect to claim 4, Meador discloses each identified term, those data records which are appropriate for the identified terms are looked for in a list of stored data records, see (102, FIG. 5, col. 3, lines 9-35, FIG. 4, FIG. 5, col. 8, lines 55-67 to col. 9, lines 1-12).

With respect to claim 5, Meador discloses when data being input, the input is completed by a data record appropriate for the identified term, using a form-based dialogue structure, see (FIG. 5, col. 3, lines 9-35, FIG. 4, FIG. 5, col. 8, lines 55-67 to col. 9, lines 1-12).

With respect to claim 6, Meador discloses that the data input is completed in response to a request signal, see (col. 11, lines 11-34).

With respect to claim 7, Meador discloses that the number of data records found can be reduced by inputting one or more further terms, see (col. 3, lines 9-35, FIG. 4, FIG. 5, col. 8, lines 55-67 to col. 9, lines 1-12).

With respect to claim 10, Meador discloses that an announcement/display sequence of the data record is defined as a function of their overall probability (confidence value), see (joint probability, FIG. 4, FIG. 5, col. 11, lines 20-67 to col. 12, lines 1-19).

With respect to claim 11, Meador discloses that the identified terms are announced and/or displayed individually and successively, or as a selection list for confirmation or selection, see (FIG. 4, FIG. 5, col. 11, lines 20-67 to col. 12, lines 1-19).

With respect to claim 12, Meador discloses if the input is a voice input, the confidence value is established in the normal manner for voice recognition, see (col. 12, lines 20-36).

With respect to claim 13, Meador discloses that the voice input by a user is first of all subjected to speaker identification, and in that the subsequent voice recognition process is carried out taking account of the result of the speaker identification, see (col. 1, lines 41-57).

With respect to claim 14, Meador discloses that the input is made via an alphanumeric input device, with the terms entered in this way first of all being assigned the confidence value for reliable identification, see (FIG. 4, FIG. 5, col. 11, lines 20-67 to col. 12, lines 1-19).

With respect to claim 15, Meador discloses that the incorrectly alphanumerically input term, which has already frequently been input incorrectly in a manner specific to a particular user, is assigned a lower confidence value as a function of input-specific error statistics, see (col. 21, lines 12-60).

With respect to claim 16, Meador discloses that the incorrectly alphanumerically input term, which has already frequently been input incorrectly in a manner specific to a particular user, is automatically corrected, with corrected term being assigned a confidence value which is lower than the confidence value for reliable identification, see (col. 21, lines 12-60).

With respect to claim 17, Meador discloses that the input is image input, see (col. 8, lines 55-67 to col. 9, lines 1-12).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW
January 8, 2004


SHAHID ALAM
PRIMARY EXAMINER